

REMARKS

Claims 146 and 148-151 are pending. Claims 146 and 148-151 are provisionally rejected for obviousness-type double patenting over claims 1-21 of copending U.S. Serial No. 11/795,540 (“the ‘540 Application”). Claims 146 and 148-151 are rejected under 35 U.S.C. § 102(b) as being anticipated by Keller et al. (U.S. Patent Publication No. 2002/0187548; hereinafter “Keller”). By this reply, Applicant amends claim 146, adds new claims 158-160, and addresses each of the rejections.

Claim 146 is amended to specify that the isolated cell is an adult cell that expresses Hox11 and lacks expression of CD45. Support for the amendment to claim 146 is found in the specification at, e.g., paragraphs [0050], [0053], and [0096] of the published application, U.S. Patent Publication No. 2007/0116688. Support for new claims 158-160 is found in the specification at, e.g., paragraphs [0058], [0059], [0088], [0089], and [0115] of the published application, U.S. Patent Publication No. 2007/0116688. No new matter is added by the amendment.

Rejection under 35 U.S.C. § 102(b)

Claims 146 and 148-151 are rejected under 35 U.S.C. § 102(b) as being anticipated by Keller. For the reasons discussed below, this rejection may now be withdrawn as Keller fails to teach or suggest this subject matter of claim 146, as presently amended, and claims dependent therefrom.

To form the basis of a proper rejection under 35 U.S.C. § 102, a cited reference must disclose each and every element of the rejected claim. *See Lewmar Marine Inc. v. Barent Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987) and Manual of Patent Examining Procedure (MPEP) § 2131. By entry of the amendment presented herein to claim 146, claims 146 and 148-151 now specify that the isolated Hox11(+), CD45(-) cell is an “adult” (e.g., non-embryonic) cell. Keller does not describe or suggest an adult Hox11(+), CD45(-) cell.

Keller describes only embryonic cells (e.g., embryonic stem and embryoid body derived cells obtained from the inner cell mass of a blastocyst stage embryo) that have been transformed with a Hox 11 gene. Keller, in its description of the embryonic character of its cells, states at

paragraph [0047]:

Applicants have discovered that culturing of an ES cell population for a certain period of time results in the differentiation of the ES cell population to an EB cell population in which the EB cells are pluripotent. If cultured for too long, as has been done by prior investigators, the EB cell population loses pluripotency. As such, in accordance with the present invention, an EB cell population of the present invention is derived by culturing a population of ES cells for a suitable amount of time to produce a pluripotent population of EB cells. In other words, an EB cell population of the present invention is derived by culturing a population of ES cells for an amount of time that maintains an EB cell population at a stage of pluripotency.

Keller further describes the transformation of the embryonic cell population with an exogenous Hox 11 gene to promote immortalization (see, e.g., paragraph [0118]). Thus, Keller does not describe or suggest an adult Hox11(+), CD45(-) cell. Accordingly, Keller fails to disclose each and every element of present independent claim 146, and claims dependent therefrom.

Applicant has also added new claims 158-160. For the reasons discussed above, the subject matter of claims 158-160 is also not taught or suggested by Keller.

Reconsideration and withdrawal of the rejection of claims 146 and 148-151 under 35 U.S.C. § 102(b) are respectfully requested.

Obviousness-Type Double Patenting

Claims 146 and 148-151 are provisionally rejected for obviousness-type double patenting over claims 1-21 of the '540 Application. It is respectfully submitted that claims 1-21 of the '540 Application were cancelled in the Response to Office Action filed on May 19, 2010, and therefore, the double-patenting rejection should be withdrawn.

CONCLUSION

Applicant submits that present claims 146, 148-151, and 158-160 are in condition for allowance and such action is respectfully requested.

Respectfully submitted,

Date: 19 May 2010



Todd Armstrong, Ph.D.

Reg. No. 54,590

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045